

REMARKS

The final Office action of 25 January 2006 (Paper No. 20060120) has been carefully considered. Allowance of claims 8, 9, 18 and 19, as set forth in paragraph 5 of the final Office action, is appreciated. No claims are amended. Thus, claims 1 thru 20 remain pending in the application.

It is first noted that, in paragraph 6 of the final Office action, the Examiner cited six (6) U.S. patents as being relevant to the present application. Of those six patents, Miller, U.S. Patent No. 4,813,076 and Kurihara, U.S. Patent No. 5,541,907 are not cited in the PTO-892 form attached to the final Office action. It is respectfully requested that these two patent references be made of record by being cited in a PTO-892 form.

In paragraph 4 of the final Office action, claims 1 thru 7, 10 thru 17 and 20 are rejected under 35 U.S.C. §103 for alleged unpatentability over Jeong *et al.*, U.S. Patent No. 5,218,489 in view of Kubota, U.S. Patent No. 5,359,428. For the reasons stated below, it is submitted that the invention recited in the claims, as now amended, is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

In rejecting independent 1, the Examiner cites Jeong *et al.* '489 as disclosing a video signal processing circuit having an envelope detector, the Examiner citing the

envelope detector 200 of Figures 2 and 3 of Jeong *et al.* '489. The Examiner then cites the comparator 300 and second amplifier 450 of Figures 2 and 3 of Jeong *et al.* '489 as corresponding to the claimed level variation switching circuit "for changing an envelope level of the FM video signal (the video signal detected by the reproducing head HD and that supplies to the comparator (300))" (quoting from the last two lines on page 2 of the final Office action). However, the comparator 300 and second amplifier 450 do not perform the function of the level variation switching circuit, as that function is recited in independent claim 1.

In the latter regard, Jeong *et al.* '489 discloses that the comparator 300 compares a signal from the second amplifier 450 with the signal from a waveform shaper 230, and supplies the compared data D to the microcomputer 400 (*see* column 2, lines 54-57 of Jeong *et al.* '489). Therefore, the comparator 300 and the second amplifier 450 cited by the Examiner do not perform the function of "changing an envelope level of the FM video signal" as recited in independent claim 1 (line 6 thereof); rather, they merely generate a comparison signal or "compared data" D.

Jeong *et al.* '489 then discloses that, in the microcomputer 400, the output signal D of the comparator 300 is "stepped up or down based on the duty ratio difference supplied by one step, and the resulting tracking control data is supplied to the servo stage 500, so that the tracking is automatically controlled" (quoting from column 3, lines 56-60

of Jeong *et al.* '489). Thus, if the Examiner is contending that the function of stepping up or stepping down the output signal D of the comparator 300 corresponds to the recited function of "changing an envelope level of the FM video signal" (as recited in independent claim 1, line 6), then the microcomputer 400 must necessarily be a part of the combination of elements corresponding to the recited level variation switching circuit. That is to say, the element of Jeong *et al.* '489 corresponding to the recited level variation switching circuit must include not only the comparator 300 and the second amplifier 450, but also the microcomputer 400.

Referring to the last step of the method recited in independent claim 1, that step consists of "connecting an input of the level variation switching circuit to a control output of a microprocessor so that ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from the microprocessor" (quoting from the last three lines of independent claim 1). Therefore, since the microcomputer 400 of Jeong *et al.* '489 must necessarily be a part of the combination cited by the Examiner as corresponding to the recited level variation switching circuit, the microcomputer 400 cannot correspond to the microprocessor recited in the last step of independent method claim 1. Moreover, it is clear, in any event, that the microcomputer 400 does not perform ON/OFF switching control of the level variation switching circuit, as admitted by the Examiner in the second paragraph on page 3 of the final Office action.

In that regard, the Examiner cites Kubota *et al.* '428 as allegedly disclosing a tape speed selector to record a signal at an appropriate speed, the Examiner further asserting that Kubota *et al.* '428 "discloses connecting an input of the level variation switching circuit (see fig. 8 SP/LP select (55)) to a control output of a microprocessor so that ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from ((a)) the microprocessor (see input terminal (56) in fig. 8 and col. 11 lines 54-64 and col. 12 lines 17-54)" (quoting from the third paragraph on page 3 of the final Office action). Applicant respectfully disagrees with this analysis and the alleged disclosure of a level variation switching circuit in Kubota *et al.* '428 for the following reasons.

First, the element 55 of Figure 8 of Kubota *et al.* '428, cited by the Examiner, is merely an SP/LP select switch, that is, a mode selector switch by means of which a user may manually or a processor may automatically designate the speed at which a video tape is played or recorded, "SP" designating "short play" and "LP" designating "long play" (see column 11, lines 54-57 of Kubota '428).

Second, it should be noted that the mode selector 55 does not produce an output which will perform ON/OFF switching control of a level variation switching circuit since the output of the mode selector 55 (in Figure 8 of Kubota *et al.* '428) is merely connected to a summing circuit 54. Thus, the arrangement of Figure 8 of Kubota *et al.* '428 is an

entirely different arrangement relative to the arrangement disclosed in Jeong *et al.* '489.

Since the arrangement of Kubota *et al.* '428 is an entirely different arrangement relative to the arrangement disclosed in Jeong *et al.* '489, it is highly doubtful that one of ordinary skill in the art, upon reviewing the disclosure of Jeong *et al.* '489, would be led to the disclosure of Kubota *et al.* '428 for the purpose of modifying the disclosure of Jeong *et al.* '489. It is respectfully submitted that the only reason that the Examiner has been led to the disclosure of Kubota *et al.* '428 is that the Examiner has had the benefit of reviewing the disclosure of the present application which, of course, would not be available to a person of ordinary skill in the art as of the date of the invention.

Furthermore, even if the combination of Jeong *et al.* '489 and Kubota *et al.* '428 would be obvious or available to a person of ordinary skill in the art as of the date of the invention, the combination of those two references, or the modification of Jeong *et al.* '489 in accordance with the disclosure of Kubota *et al.* '428, would not result in the present invention, as claimed. Specifically, if one were to take the mode selector 55 of Figure 8 of Kubota *et al.* '428, and substitute it for the combination of the comparator 300, microcomputer 400 and amplifier 450 of Figure 2 of Jeong *et al.* '489, one would still not obtain an arrangement comprising a level variation switching circuit for changing an envelope level of an FM video signal, as recited in claim 1, and one would also not obtain an arrangement wherein an input of a level variation switching circuit is

connected to a control output of a microprocessor so that ON/OFF switching control of a level variation switching circuit is executed in response to a control data input from the microprocessor, as recited in the last two paragraphs of independent claim 1.

For the latter reasons, the invention recited in independent claim 1 is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

With respect to dependent claims 2 and 3, the Examiner's rejection is based primarily on the statement contained in the last paragraph on page 4 of the final Office action, in which the Examiner alleges that "Kubota discloses the level variation switching circuit reduces variation in the envelope level of the FM video signal", the Examiner referring to the mode selector 55 of Figure 8 of Kubota *et al.* '428. However, as pointed out above, the element 55 of Figure 8 of Kubota *et al.* '428 is clearly a mode selector switch which merely sends a signal to the summer circuit 54 designating whether a "short play" or a "long play" speed for operation of a video tape recorder has been selected by a user or by a microprocessor.

With respect to dependent claim 4, the Examiner alleges that Jeong *et al.* '489 discloses a level variation switching circuit having a resistor at an output terminal of the envelope detector, the Examiner referring to the resistor VR in Figure 2 of Jeong *et al.*

'489, as well as column 2, line 66 - column 3, line 6 of the patent. However, given the fact that the Examiner alleges that the comparator 300 and amplifier 450 of Figure 2 of Jeong *et al.* '489 correspond to the recited level variation switching circuit (note that, as stated above, microcomputer 400 should also be a part of that combination), the resistor VR connected between the power source Vcc and the switch SW1 is not connected to an output terminal of the combination which the Examiner alleges to correspond to the level variation switching circuit. Rather, the variable resistor VR is connected to an input terminal of the microcomputer 400. Moreover, the resistor VR is connected to the input terminal only when the switch SW1 is moved to the "manual" position. Thus, the variable resistor VR of Figure 2 of Jeong *et al.* '489 does not correspond to the resistor recited in dependent claim 4.

Turning to consideration of independent claim 5, that claim recites a video signal processing integrated circuit (IC) corresponding to the circuit recited as a part of independent method claim 1 discussed above. Thus, the Examiner rejects independent claim 5 on the same basis as independent 1 is rejected. For that reason, the arguments set forth above relative to the patentability of independent claim 1 are applicable to the question of patentability of independent claim 5. Therefore, the invention recited in independent claim 5 is distinguishable from the prior art cited by the Examiner on the same basis, as set forth above, that the invention of independent claim 1 is distinguishable over the prior art cited by the Examiner.

On page 6 of the final Office action, the Examiner states that dependent claim 10 is rejected for the same reason as discussed with respect to dependent claims 2 and 3. Therefore, the arguments set forth above relative to dependent claims 2 and 3 are applicable to the question of patentability of dependent claim 10.

At the bottom of page 6 of the final Office action, the Examiner states that the limitations of independent 11 can be found in independent claim 1 and associated dependent claims 2 and 3. Therefore, the Examiner states that independent claim 11 is rejected for the same reasons as discussed with respect to claims 1 thru 3. Accordingly, the arguments set forth above relative to independent claim 1 and associated dependent claims 2 and 3 apply equally to the question of the patentability of the invention recited in independent claim 11. Therefore, the invention recited in independent claim 11 is distinguishable from the prior art cited by the Examiner for the same reasons as set forth above relative to claims 1 thru 3.

At the top of page 7 of the final Office action, the Examiner states that the limitations of dependent claims 12 and 13 can be found in dependent claims 2 and 3, and therefore the Examiner rejects dependent claims 12 and 13 for the same reasons as discussed with respect to claims 2 and 3. Accordingly, the arguments set forth above relative to dependent claims 2 and 3 apply equally to the question of the patentability of the invention recited in dependent claims 12 and 13, and thus, dependent claims 12 and

13 are patentable for the same reasons as set forth above relative to claims 2 and 3.

Similarly, on page 7 of the final Office action, the Examiner states that dependent claims 14 is rejected for the same reasons as set forth relative to dependent claim 4. Therefore, the invention of dependent claim 14 is patentable for the same reasons as set forth above relative to dependent claim 4.

Finally, on page 7 of the final Office action, the Examiner states that independent claim 15 is rejected for the same reasons as set forth relative to independent claim 5, and the Examiner also states that dependent claims 16, 17 and 20 are rejected for the same reasons as set forth relative to dependent claims 6, 7, and 2 and 3, respectively. Therefore, for the same reasons set forth above relative to dependent claims 6 and 7, as well as dependent claims 2 and 3, the invention of dependent claims 16, 17 and 20 is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this Response.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. E. Bushnell", is written over a horizontal line.

Robert E. Bushnell,
Attorney for the Applicant
Registration No.: 27,774

1522 "K" Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56348
Date: 4/24/06
I.D.: REB/JGS